

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE REGION 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

ADMINISTRATIVE RECORD

IN THE MATTER OF: .

BLOCK P TAILINGS SITE
Lewis and Clark National Forest,
Montana

THE DOE RUN RESOURCES CORPORATION, d.b.a.)
The Doe Run Company

RESPONDENT

Proceeding Under Sections 104, 122(a)
and 122(d)(3) of the Comprehensive
Environmental Response, Compensation
and Liability Act as amended (42 U.S.C.
§§ 9604, 9622(a) and 9622(d)(3)).

EPA Docket No.:
CERCLA-VIII-98-23

ADMINISTRATIVE ORDER ON CONSENT
FOR ENGINEERING EVALUATION/COST ANALYSIS

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I. INTRODUCTION AND STATEMENT OF OBJECTIVES

1. This Administrative Order on Consent ("AOC") is entered into voluntarily by the United States Department of Agriculture, Forest Service ("Forest Service"), the United States Environmental Protection Agency ("EPA"), and The Doe Run Resource Corporation, d.b.a. The Doe Run Company, as a Respondent (hereafter "Respondent"), for performance by Respondent of an Engineering Evaluation/Cost Analysis ("EE/CA") pursuant to 40 C.F.R. § 300.415 of the National Oil and Hazardous Substance Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"), at the Block P Tailings Site (the "Site") and for recovery of certain costs incurred by the United States, as further defined in this AOC.

2. The objectives of this AOC are for Respondent to conduct an EE/CA to determine and evaluate removal action requirements and alternatives designed to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of hazardous substances at the Site in accordance with the NCP, 40 C.F.R. § 300.415, and to reimburse the United States for and Future Response Costs incurred in connection with Site, as set forth in Section XVIII of this AOC.

3. All activities conducted under this AOC are subject to the joint approval of the Forest Service and EPA (hereafter referred to as the "Federal Agencies" when acting in a joint capacity). Respondent shall provide all appropriate and necessary information for an EE/CA and an Action Memorandum that

is consistent with CERCLA and the NCP. The activities conducted under this AOC shall be conducted in compliance with all applicable EPA and/or Forest Service guidances. Such guidances will be provided to Respondent upon request.

II. JURISDICTION AND COORDINATION OF AGENCY OVERSIGHT

4. This AOC is entered into under the authority vested in the President of the United States by Sections 104, 122(a) and 122(d)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9604, 9622(a) and 9622(d)(3). This authority was delegated to the Secretary of the Department of Agriculture (the "Secretary") and to the Administrator of EPA (the "Administrator") by Executive Order 12580, 52 Fed. Reg. 2923-26 (January 23, 1987), 3 C.F.R., 1987 Compilation, p. 193. The Secretary's authority was further delegated to the Chief of the Forest Service (the "Chief") by 7 C.F.R. § 2.60(a)(40). The Chief's authority was re-delegated to Regional Foresters, pursuant to the Forest Service Manual 2164.04c, 2.1, effective November 10, 1994. The Administrator's authority was delegated to Regional Administrators on September 13, 1987, by EPA Delegation No. 14-14-C. This authority has been further re-delegated by the Regional Administrator to the Assistant Regional Administrator for Environmental Protection and Remediation.

5. By signing this Order, Respondent consents to the Federal Agencies' jurisdiction to issue this AOC and agrees to comply with and be bound by the terms and conditions of this AOC. In

any action by the United States to enforce the terms of this AOC, Respondent consents to and agrees not to contest the authority and jurisdiction of either of the Forest Service or EPA to issue and enforce this AOC. Respondent further agrees not to contest the validity of this AOC or its terms.

6. The Forest Service and EPA have agreed to coordinate their respective CERCLA authorities for the purpose of overseeing the response action required under this AOC pursuant to a Memorandum of Understanding ("MOU"). Under the MOU, the Forest Service and EPA have agreed that the Forest Service will act as the lead federal agency for the purpose of overseeing Respondent's Work under this AOC. As is further provided in paragraph 18 of this AOC, both the Forest Service and EPA have designated their own On-Scene-Coordinators or Project Managers at the Site; however, for the purpose of coordinating the Federal Agencies' oversight of the Work under this AOC at the Site, the Forest Service's On-Scene-Coodinator will serve as Respondent's primary contact and will provide all formal notifications to Respondent pursuant to this AOC, except as is otherwise provided in this AOC. By providing a copy of this AOC to the State of Montana ("State"), the Federal Agencies have notified the State that this AOC is being issued and that the USDA Forest Service will act as the lead federal agency for the purpose of overseeing Respondent's Work pursuant to this AOC. It is the Federal Agencies' intent to provide the State with a meaningful

involvement at the Site as set forth in Subpart F of the NCP, 40 C.F.R. Part 300.

III. PARTIES BOUND

7. This AOC shall apply to, and be binding upon, Respondent and its agents, successors, and assigns. The signatories to the AOC certify that they are authorized to execute and legally bind the parties they represent to this AOC.

8. Respondent shall provide a copy of this AOC to each contractor, subcontractor, laboratory and consultant retained to perform work under the AOC and shall condition its contracts on compliance with the terms of the AOC. Notwithstanding the provisions of any such contract, however, Respondent is, and shall remain, responsible for compliance with this AOC.

IV. DEFINITIONS

"Action Memorandum" shall mean the decision document to be issued by the Forest Service that will select the removal alternative for the Site.

"AOC" shall mean this Administrative Order on Consent and all attached appendices. In the event of conflict between this AOC and any appendix, this AOC shall control.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation & Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, et seq.

"Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of

time under this AOC, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"EE/CA" shall mean an engineering evaluation/cost analysis of removal alternatives in accordance with EPA's Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA, OSWER Directive No. 9360.0-32, August 1993.

"Effective date of this AOC" shall mean the date the AOC has been executed by Respondent, EPA and the Forest Service.

"EPA" shall mean the United States Environmental Protection Agency.

"Federal Agencies" shall mean the EPA and the Forest Service, acting in a coordinated fashion with respect to this AOC and the Site, as provided in the MOU.

"Forest Service" shall mean the United States Department of Agriculture Forest Service.

"Memorandum of Understanding" or "MOU" shall mean the document describing the manner in which EPA and the Forest Service have agreed to coordinate their oversight of the Work under this AOC.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and amendments thereto.

"NFS lands" shall mean National Forest System lands within the Site that are under the custody, jurisdiction and control of the Forest Service.

"Site" shall mean the Block P Tailings Site, which is located approximately 40 miles southeast of Great Falls, Montana, in the southeast 1/4 of Section 13, and portions of Sections 15, 14, 23, and 24 Township 15 North, Range 8 East of the Montana Principal Meridian. The Site includes NFS lands within the exterior boundaries of the Lewis & Clark National Forest and some adjacent private property. The Site is further described in paragraph 10 of this AOC.

"Statement of Work" or "SOW" shall mean the document that outlines the Work to be performed by Respondent to implement the removal action and satisfy the requirements of this AOC. The SOW is attached to this AOC as Appendix 1.

"USDA" shall mean the United States Department of Agriculture.

"Work" shall mean all tasks Respondent is required to perform pursuant to this AOC.

V. FINDINGS OF FACT

9. The following findings of fact and conclusions of law are set forth solely for the purpose of establishing jurisdiction for this AOC. Respondent does not admit any issue of fact or conclusion of law stated herein. Moreover, the parties expressly reserve their rights to contest the admissibility of any finding of fact or conclusion of law stated herein for any purpose other

than establishing the Federal Agencies' jurisdiction in this matter.

10. The Block P Tailings Site is located approximately 40 miles southeast of Great Falls, Montana, in the southeast 1/4 of Section 13, and portions of Sections 14, 15, 23, and 24, Township 15 North, Range 9 East of the Montana Principal Meridian. The Site consists of approximately 10,000 cubic yards of tailings deposited along the Dry Fork of Belt Creek and approximately 500,000 cubic yards of impounded mill tailings covering roughly 13 acres. The tailings are largely contained in two impoundments: an upper impoundment sitting at the foot of a moderately sloping, forested hillside, and a lower impoundment located approximately 30 feet below the upper impoundment in the flood plain of Galena Creek. Most of the Site is located on lands under the jurisdiction, custody and control of the Forest Service within the established boundaries of the Barker/Hughesville Mining District on the Kings Hill Ranger District, Lewis & Clark National Forest, Montana. A portion of the Site is located on adjacent private lands.

11. Doe Run, formerly known as St. Joseph Lead Company and St. Joe Minerals Corporation, owned the Site from approximately March 1927 until approximately 1943 and operated a mine upstream from the Site and a mill at the Site from approximately November 1928 through approximately 1930 and again from approximately 1941 to approximately 1943. Doe Run's activities resulted in the disposal of mill tailings at the Site.

12. The Forest Service and the Montana Department of Environmental Quality are jointly funding an inspection of the entire Barker/Hughesville Mining District, including that portion that includes the Site. The Forest Service commenced a time critical removal action at the Site in 1995 to minimize the risk of further release of hazardous substances from tailings at the Site. Work completed to date includes, but is not limited to, construction of a diversion channel around the tailings; enhancement and repair of the berm on the lower tailings impoundment; construction of overflow outlets to provide for the controlled release of excess water from the lower impoundment cells; channeling of stormwater runoff to enter the lower impoundment containing the overflow outlet; and installation of other erosion control measures.

13. In September 1995, the Forest Service approved additional response action consisting of Doe Run's sampling and analysis of 33 borings from the tailings impoundments to determine the feasibility of reprocessing the tailings material. The results of testing run on the samples, including X-ray diffraction, revealed elevated levels of total and water extractable aluminum, arsenic, copper, iron, manganese, mercury, and zinc. Groundwater samples extracted from wells located down-gradient of the Site have revealed elevated concentrations of dissolved aluminum, cadmium, copper, iron, lead, manganese, and zinc.

14. Pursuant to CERCLA, and the authorities delegated to the Forest Service, the Forest Service is the lead agency for response actions at the Site. The Forest Service and EPA have incurred, and continue to incur, response costs associated with the Site.

15. The Site poses a substantial threat of a release of hazardous substances from mine tailings to off-site locations including adjacent private lands, surface waters and groundwater.

VI. CONCLUSIONS OF LAW

16. Based on the Findings of Fact set forth above, and the Administrative Record supporting the removal action at the Site, the Federal Agencies make the following Conclusions of Law:

a. The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. There are hazardous substances, as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), pollutants, or contaminants present at the Site including, but not limited to, arsenic, lead, copper, mercury, cadmium, manganese, and zinc.

c. The presence of hazardous substances at the Site or the past, present or potential migration of hazardous substances currently located at or emanating from the Site, constitute actual and/or threatened "releases," as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

d. Respondent is a "person," as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

e. Respondent may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), as a person who is either a current owner or operator of the Site, or as a person who at the time of disposal of any hazardous substance owned or operated the Site.

f. The conditions present at the Site constitute a threat to the public health, welfare or the environment based upon the criteria for a removal action as stated in the National Contingency Plan ("NCP"), 40 C.F.R. § 300.415(b), including, but not limited to, high levels of hazardous substances or pollutants in soils largely at or near the surface, that may migrate.

g. The response actions required by this AOC are necessary to protect the environment, are in the public interest, are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1) and 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

h. Based on information currently available, the Federal Agencies have determined, for purposes of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), that Respondent is qualified to properly and promptly perform the EE/CA required by this AOC.

i. The response actions performed by the Forest Service to date have been conducted in a manner not inconsistent with the NCP, 40 C.F.R. Part 300, and the costs incurred in connection with these response actions are recoverable under Sections 107(a) of CERCLA, 42 U.S.C. § 9607(a).

VII. ON-SCENE COORDINATOR/PROJECT COORDINATOR

17. The Forest Service has designated Robin Strathy as its On-Scene Coordinator ("OSC") and EPA has designated Rosemary Rowe as its Project Manager for the Site. Within five (5) days of the effective date of this AOC, Respondent shall designate a Project Coordinator for the Site. Each Coordinator or Project Manager shall be responsible for overseeing implementation of the work and/or activities required under this AOC for his/her agency or organization. All written communications between the parties concerning implementation of this AOC shall be directed to the Forest Service's On-Scene Coordinator, EPA's Project Manager, or Respondent's Project Coordinator, by regular or overnight mail or by facsimile, with copies to such other persons as the Federal Agencies and Respondent, respectively, may reasonably designate. The parties may change their respective OSC/Project Manager/Project Coordinator and shall notify each other in writing at least five (5) days prior to any such change.

18. Deliverables and other written communications submitted under this AOC shall be sent to the following persons:

For the Forest Service:

Robin Strathy
Lewis & Clark National Forest
P.O. Box 869
Great Falls, MT 59403

Steven C. Silverman
Office of the General Counsel
P.O. Box 25005
Denver, CO 80225

For the EPA:

Rosemary Rowe
U.S. Environmental Protection Agency
Region 8, Montana Office
301 S. Part, Drawer 10096
Helena, MT 59626-0096

For the State of Montana:

Judy Reese
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

For The Doe Run Company:

John Carter
The Doe Run Company
P.O. Box 500
Viburnum, MO 65566

Walter Nowotny, Vice-President
The Doe Run Company
1801 Park 270 Drive, Suite 330
St. Louis, MO 63146

19. The Forest Service's OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any work required by this AOC on NFS lands or to take any necessary response action to abate conditions at the Site that may present an imminent and substantial endangerment to the public health, welfare or the environment. EPA's Project Manager shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and OSC by the NCP. In addition, EPA's Project Manager shall have the authority consistent with the NCP, to halt any work required by this AOC on private property, and to take any necessary response action when she determines that conditions on private property at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the OSC or EPA's Project Manager from the Site shall not be cause for stoppage or delay or work required pursuant to this AOC.

VIII. EE/CA: WORK TO BE PERFORMED

20. Respondent shall prepare, perform and submit to the Federal Agencies for review and approval an EE/CA in accordance

with EPA's Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA, OSWER Directive No. 9360.0-32, August 1993; and in accordance with the EE/CA Statement of Work ("SOW") attached hereto. The EE/CA shall include, but is not limited to, the following:

a. An identification of removal action objectives, as more specifically set forth in the SOW and OSWER Directive 9360.0-32;

b. An identification and comparative analysis of removal action alternatives, including an analysis of their effectiveness, cost, and ability to be implemented, as more specifically set forth in the SOW and OSWER Directive 9360.0-32;

c. A recommended removal action alternative.

21. All Work performed in connection with the preparation of the EE/CA shall be conducted under the direction and supervision of qualified personnel with experience in CERCLA investigations and response actions. Respondent shall notify the Federal Agencies of Respondent's qualifications or the names and qualifications of all personnel, contractors or subcontractors retained by Respondent to perform the Work required under this AOC. The Federal Agencies retain the right to disapprove of any, or all, of the contractors or subcontractor retained by Respondent, or of Respondent's choice of itself to perform the Work. Respondent shall assure that it or any contractor or subcontractor retained by Respondent maintains for the duration of this AOC comprehensive general liability insurance and

automobile insurance with limits of at least one million dollars, combined single limit.

22. All samples analyzed as part of the EE/CA shall be analyzed by a laboratory that participates in a quality assurance/quality control program equivalent to that specified in the documents entitled "USEPA Contract Laboratory Program Statement of Work for Organic Analysis" (October 1986) and "USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis" (July 1995) (hereinafter "Contract Lab Statements of Work").

23. All Work performed pursuant to this AOC, including all sample collection and analysis, shall be conducted in accordance with CERCLA, the NCP, and applicable agency guidance documents. Applicable guidance documents include, but are not limited to the following EPA guidances: Contract Lab Statements of Work; "NEIC Manual for Groundwater/Subsurface Investigations at Hazardous Waste Sites," Document No. EPA/330/9-81-002; "Removal Program Representative Sampling Guidance, Volume 1-Soil", EPA 540/G-90/004 (Nov. 1991); and "EPA Guidance for Quality Assurance Project Plans," EPA QA/G-5 (EPA/600/R-98/018, February 1998).

24. During performance of the Work required under this AOC, Respondent shall provide the Federal Agencies and the State of Montana with data and deliverables as described below and/or in the SOW. A schedule for submittal of the deliverables is contained in paragraph 28 of this AOC.

25. Upon either the Forest Service OSC's or the EPA Project Manager's request, Respondent shall provide the Federal Agencies with non-validated data analysis within 30 days after analysis. Respondent shall also notify the Federal Agencies in writing of the completion of significant field activities, including all sampling events, within seven days of the date of completion.

26. The documents required to be submitted for approval pursuant to this AOC shall be known as "deliverables." For the purposes of this AOC, the deliverables include an EE/CA Work Plan, a Sampling and Analysis Plan, a Health and Safety Plan, a Community Relations Plan, and a Final EE/CA Report. These deliverables are described more fully below:

a. EE/CA Work Plan. Respondent shall submit a complete EE/CA Work Plan (hereafter referred to as the "Work Plan") that satisfies the EE/CA SOW.

b. Sampling and Analysis Plan. Respondent shall submit a Sampling and Analysis Plan ("SAP"), that will include procedures for collecting, transporting and analyzing all samples collected at the Site, as well as procedures for quality assurance/quality control ("QA/QC"). The SAP shall incorporate the provisions of paragraphs 22-23 of this AOC and shall be consistent with 40 C.F.R. § 300.415(b)(4)(ii); and EPA's guidance entitled "EPA Guidance for Quality Assurance Project Plans, EPA QA/G-5 (EPA/600/R-98/018, February 1998). The SAP shall identify

laboratories and data quality assurance organizations to be used during performance of the EE/CA.

c. Health and Safety Plan. Respondent shall submit a Health and Safety Plan consistent with the NCP, any applicable state regulations, and any applicable agency guidance documents, including EPA's current Standard Operating Safety Guide.

d. Final EE/CA Report. Respondent shall submit a report documenting implementation of the Work Plan, including modifications approved by the Federal Agencies as provided herein, if any, made during such implementation. The final report shall contain a detailed analysis of removal alternatives, as described in the SOW, paragraph 20 of this AOC, and the Work Plan.

27. All deliverables shall be submitted initially by Respondent in draft, in accordance with the schedule provided in paragraph 28 of this Section, and are subject to review, comment, and approval by the Federal Agencies. Within 20 working days of Respondent's receipt of the Federal Agencies' comments on each draft deliverable, Respondent shall amend and submit a revised deliverable to the Federal Agencies and the State of Montana that responds substantively to all the Federal Agencies' comments and corrects all deficiencies identified by the Federal Agencies. It is anticipated that some deliverables may require more than one set of revisions. Deliverables may be modified, if necessary, only upon the approval of the Federal Agencies. In the event Respondent amends or revises a report, plan or other deliverable

upon receipt of the Federal Agencies' comments, if the Federal Agencies subsequently disapprove of the revised deliverable, or if subsequent deliverables do not fully reflect the Federal Agencies' directions for change, the Federal Agencies retain the right to seek stipulated or statutory penalties pursuant to Section 109 of CERCLA, 42 U.S.C. § 9609, and Section XIX of this AOC, perform their own studies, complete the EE/CA themselves (or any portion of the EE/CA) under CERCLA and the NCP, and seek reimbursement from Respondent for their costs, and/or seek any other appropriate relief.

28. Respondent shall submit the deliverables required by this AOC to the Forest Service, EPA and the State of Montana in accordance with the following schedule:

<u>Deliverable</u>	<u>Deadline</u>
Work Plan	Within 20 working days of the effective date of this AOC
Sampling and Analysis Plan	Within 20 working days of the effective date of this AOC
Health and Safety Plan	Within 20 working days of the effective date of this AOC
Final EE/CA Report	Within 150 days of the Federal Agencies' approval of Work Plan

29. Respondent shall not implement the actions described in each deliverable until receiving Federal Agency approval of each such deliverable. Moreover, all Work performed pursuant to this AOC shall be in accordance with approved deliverables.

Neither a failure of the Federal Agencies to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by the Federal Agencies.

30. The Federal Agencies reserve the right to stop work from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during performance of the Work required under this AOC if Respondent fails to comply materially with the terms of this AOC, or as otherwise provided herein.

31. If the Federal Agencies perform any of the Work required under this AOC pursuant to Section X of the AOC, or as otherwise provided herein, Respondent shall incorporate or integrate the results of such work into any appropriate report or deliverable required pursuant to this AOC.

32. The Federal Agencies will prepare a Community Relations Plan in accordance with applicable EPA guidances(s) and the NCP. To the extent requested by the Federal Agencies, Respondent shall provide information and otherwise cooperate with the Federal Agencies in support of the Community Relations Plan.

IX. EMERGENCY RESPONSE AND NOTIFICATION

33. In the event of conditions posing an immediate threat to human health, welfare or the environment, Respondent shall immediately notify the Forest Service's OSC by telephone within 24 hours of discovery of the threat. In the event that the Federal Agencies determine that the immediate threat warrant

changes to the Work Plan, the Federal Agencies shall modify or amend the Work Plan in writing accordingly. Respondent shall implement the Work Plan as modified or amended. Any determination by the Federal Agencies that an immediate response at the Site is required shall not be subject to the dispute resolution provisions of this AOC.

34. Nothing in the preceding paragraph shall be deemed to limit any authority of any agency of the United States, including the Forest Service or EPA, to take, direct, or order all appropriate action to protect human health, welfare or the environment.

X. ADDITIONAL INVESTIGATION AND ANALYSIS

35. If the Federal Agencies determine that additional work is required to meet the objectives of this AOC, they may notify Respondent in writing of their determination and specify any changes to the Work Plan or any other deliverable required to implement the additional work. Within ten (10) days of receipt of the Federal Agencies' determination that additional work is required, Respondent shall advise the Federal Agencies in writing whether it will perform the additional work. In the event that Respondent does not agree to perform the additional work, the Federal Agencies may complete the work themselves and seek reimbursement from the Respondent for their costs, and/or seek any other appropriate relief. If Respondent agrees to perform the additional work, within fifteen (15) calendar days of its notice of agreement to the Federal Agencies, it shall submit to

the Federal Agencies a revised Work Plan or other appropriate deliverable describing and providing a schedule for performance of the additional work. If the Federal Agencies and Respondent agree in writing to the revisions to the Work Plan and/or the new deliverable, the revised Work Plan and/or the new deliverable shall become an attachment to this AOC and incorporated herein. Respondent shall perform all agreed upon additional tasks, including providing any additional analytical results and reports as requested by the Federal Agencies in accordance with the standards, specifications, and schedules determined or approved by the Federal Agencies.

XI. ADMINISTRATIVE RECORD AND PUBLIC COMMENT

36. The Federal Agencies retain the responsibility for releasing to the public the final EE/CA Report and any decision documents for the Site. The Federal Agencies will, after providing opportunity for public comment on the final EE/CA Report, in accordance with 40 C.F.R. §§ 300.415 and 300.820, select the removal alternative that the Federal Agencies determine is appropriate for the Site. The Federal Agencies' selection of the removal action shall not be subject to the dispute resolution procedures of this AOC.

37. Respondent shall submit to the Forest Service and EPA, upon submission of the draft EE/CA Report, any documents developed during the course of the EE/CA. Documents developed during performance of the EE/CA that Respondent shall submit to the Forest Service and EPA include, but are not limited to,

copies of plans, task memoranda, documentation of field modifications, recommendations for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports required pursuant to this AOC. Respondent shall also submit any correspondence between Respondent and state, local, or other federal authorities concerning the performance of the EE/CA or the selection of the removal action for the Site.

38. Respondent agrees to make presentations at, and participate in, meetings at the request of either the Forest or EPA during the initiation, conduct, and completion of the EE/CA. In addition to discussion of technical aspects of the EE/CA, topics include anticipated problems or new issues. Meetings may be scheduled at EPA's or the Forest Service's discretion.

39. In accordance with 40 C.F.R. §§ 300.800-825, the Forest Service will determine the contents and location of the administrative record for response actions selected for the Site.

XII. ACCESS

40. Pursuant to the terms and conditions of this AOC, Respondent and its authorized representatives are authorized by the Forest Service to have access to those parts of the Site that are under the custody, control and jurisdiction of the Forest Service solely for the purpose of implementing the terms of this AOC. If, to perform the work required by this AOC, access is needed to any area or land not under the custody, control and jurisdiction of the Forest Service, Respondent shall use best

efforts to secure access for itself and its authorized representatives, as well as for the Forest Service, EPA and the State of Montana, and their authorized representatives and contractors. Such agreements shall specify that Respondent is not EPA's, the State's or the Forest Service's representative with respect to liability associated with Site activities; Copies of such agreements shall be provided to EPA and the Forest Service prior to Respondent's initiation of field activities. Respondent shall immediately notify the Federal Agencies if after using its best efforts, it is unable to obtain such access agreements. Respondent's best efforts shall include providing reasonable compensation to any off-Site property owner. Respondent shall describe in writing its efforts to obtain access. EPA and/or the Forest Service may obtain access for the Respondent, perform those tasks or activities with EPA or Forest Service contractors, or terminate the AOC in the event that Respondent cannot obtain access. In the event that EPA and/or the Forest Service performs those tasks or activities with their contractors and does not terminate the AOC, Respondent shall perform all other activities not requiring access, and shall reimburse EPA and/or the Forest Service for all costs incurred in performing such activities. Respondent additionally shall integrate the results of any such tasks undertaken by EPA and/or the Forest Service into its reports and deliverables. Furthermore, Respondent agrees to indemnify the United States as specified in Section XXII of this AOC. Respondent also shall

reimburse the Forest Service and/or EPA for all costs and attorney's fees incurred by or on behalf of the Federal Agencies in obtaining access for the Respondent. Nothing herein shall be interpreted as limiting or affecting either EPA's or the Forest Service's right of entry or inspection authority under federal law. All parties with access to the Site under this paragraph shall comply with all approved health and safety plans.

XIII. SAMPLING AND DATA AVAILABILITY

41. Respondent shall notify the Forest Service and EPA orally at least seven (7) days prior to conducting field events, including major construction, excavation, drilling and sampling events. At the request of either the Forest Service or EPA, Respondent shall allow split or duplicate samples to be taken of any samples collected by it in the course of implementing this Order. All split samples taken by Respondent shall be analyzed by methods required in the SAP.

42. Respondent waives objections to the validity and admissibility of data generated in the course of performance of work under this AOC if such data has been validated in accordance with the QA/QC procedures set forth in the SAP.

43. Respondent agrees not to assert any business confidentiality claim, or attorney client or attorney work product privilege, with respect to any data or other information relating to conditions at or resulting from releases at the Site generated in the course of the performance of the work pursuant to this AOC. Respondent may assert a claim of business

confidentiality covering any other type of information generated pursuant to the requirements of this AOC, provided such claim is consistent with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Any such claim shall be asserted in the manner described in 40 C.F.R. 2.203(b) and substantiated at the time the claim is made. Information determined to be confidential by the Federal Agencies will be given the protection specified in 40 C.F.R. Part 2. If no such claim accompanies the information when it is submitted to EPA or the Forest Service, it may be made available to the public by either EPA or the Forest Service without further notice to Respondent.

44. In the event Respondent decides to withhold any document or information otherwise required to be disclosed by the provisions of this AOC on the basis of a claim of privilege, it shall inform the Federal Agencies of that decision and provide the Federal Agencies with the date, author, recipient(s), title, and description of the document or information withheld. Respondent shall also identify which privilege it asserts applies to the document or information withheld and explain the basis for its assertion. The Federal Agencies may at any time challenge Respondent's claims of privilege.

XIV. COMPLIANCE WITH OTHER APPLICABLE LAWS

45. All actions required to be taken pursuant to this AOC shall be performed in accordance with the requirements of all applicable local, state and federal laws and regulations except as provided in CERCLA Section 121(e), 42 U.S.C. § 9621(e), and 40

C.F.R. section 300.415(i). In accordance with 40 C.F.R. section 300.415(i), all on-Site actions required pursuant to this AOC shall, to the extent practicable, as determined by the Federal Agencies, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or State of Montana environmental laws.

XV. RECORD PRESERVATION

46. The original or one copy of all records and documents, excluding internal drafts of deliverables, in the possession, custody or control of Respondent that are generated or collected pursuant to this AOC shall be preserved for ten years following completion of the work required by this Order. At the end of this ten year period and 30 days before any document or information is destroyed, Respondent shall notify the Forest Services and EPA in writing that such documents or information may be destroyed and, upon request, shall provide the originals or copies of such documents and information to the Forest Service and/or EPA.

XVI. DISPUTE RESOLUTION

47. The dispute resolution procedures in this Section are the exclusive mechanism for resolving disputes arising under this AOC. This section applies only to disputes arising between Respondent and the Forest Service, between Respondent and EPA, or between Respondent and both the Forest Service and EPA (i.e., the Federal Agencies). Disputes arising solely between the Forest

Service and EPA shall be resolved according to the dispute resolution procedures set forth in the MOU. A dispute shall be considered to have arisen when Respondent sends EPA and the Forest Service a written Notice of Dispute.

48. In the first instance, the parties shall attempt to resolve any dispute arising under this AOC by informal negotiations. The period for informal negotiations shall not exceed twenty (20) days from the date of receipt of the Notice of Dispute, unless the parties agree in writing to modify the period for informal negotiations. If the parties fail to resolve the dispute informally, the formal dispute resolution procedure in the following paragraphs shall apply.

49. In the event the parties cannot resolve the dispute through informal negotiations, then the Federal Agencies' position shall be binding unless, within seven (7) days after the conclusion of the informal negotiations period, Respondent invokes the formal dispute resolution procedures of this section by serving on the Forest Service and EPA a written Statement of Position on the matter in dispute. Respondents's written Statement of Position shall be sent by facsimile, overnight mail or some equivalent service, and shall define the dispute and state the basis of Respondent's objections to the Federal Agencies' position.

50. Following receipt of Respondent's Statement of Position, the Forest Service shall promptly provide the Regional Forester, Forest Service Region 1, with a copy of Respondent's

Statement of Position and a written response to Respondent's Statement of Position, unless the dispute involves an EPA oversight billing. A copy of the Federal Agencies' response shall be simultaneously sent to Respondent by facsimile and/or overnight mail or some equivalent service. In the event the dispute involves an EPA oversight billing, EPA shall promptly provide the Regional Administrator of Region 8 with a copy of Respondent's Statement of Position and a written response to Respondent's Statement of Position.

51. Following receipt of Respondent's Statement of Position and the Federal Agencies' response, the Regional Forester or his/her designee, shall make a final determination resolving the matter in dispute, except for disputes over EPA oversight billings. The final Federal Agency decision-maker for any dispute over EPA oversight billings shall be the Regional Administrator for EPA Region 8. No Federal Agency decision made pursuant to this section shall constitute a final agency action giving rise to judicial review.

52. Respondent shall proceed in accordance with the final determination regarding the matter in dispute. If Respondent does not perform any required work in accordance with the final determination, the Federal Agencies may perform the work themselves and/or pursue any other appropriate relief, including judicial enforcement of this AOC pursuant to Section 122(d)(3) of CERCLA, 42 U.S.C. § 9622(d)(3), and cost recovery pursuant to Section XVIII of this AOC or other applicable law.

53. The invocation of the dispute resolution provisions of this AOC shall not extend, postpone or affect in any way any obligation of Respondent under this AOC not directly in dispute, unless the Federal Agencies agree in writing otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of the AOC. In the event Respondent does not prevail on the disputed matter, stipulated penalties shall be assessed and paid as provided in Section XVIII.

XVII. FORCE MAJEURE

54. Delays or inability to perform any of the requirements of the AOC within the time limits prescribed shall not be a violation of the Order where performance is prevented or delayed by a force majeure event. Force majeure is defined as any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors, that delays or prevents performance of any obligation under this AOC despite Respondent's best efforts to fulfill the obligation. Force majeure does not include the financial inability of Respondent to complete performance of the obligation or increased cost of performance. Respondent shall have the burden of proving force majeure by a preponderance of the evidence.

55. If any event occurs that may materially delay performance of any obligation under this AOC or submittal of any deliverable past the applicable deadline, Respondent shall notify the OSC and EPA's Project Manager verbally within twenty-four (24) hours of the time Respondent knew that the event would delay such performance or submittal. Within five (5) business days thereafter, Respondent shall notify the Forest Service and EPA in writing of the reasons for the delay, its anticipated length, measures taken or to be taken to minimize the delay, and an estimated timetable for implementation of these measures. Failure to comply with these requirements shall waive any claim of force majeure by Respondent.

56. The OSC shall notify Respondent in writing of the Federal Agency's determination as to whether force majeure applies to the event or circumstances whenever practicable within seven (7) days after receipt of written notice from Respondent. If the Federal Agencies determine that the delay has been or will be caused by circumstances constituting a force majeure, the due date for each uncompleted task in this AOC shall be extended for a sufficient period to complete the tasks that were delayed or prevented. Such period shall be at least equal to the delay resulting from the force majeure circumstance. If the Federal Agencies do not sustain Respondent's force majeure claim, or if there is no agreement on the length of an extension of time, the dispute shall be resolved in accordance with the dispute

resolution provisions in Section XVI of this AOC or the stipulated penalties provisions of Section XIX, as appropriate.

XVIII. REIMBURSEMENT OF COSTS

57. Respondent shall reimburse the Forest Service and EPA for all Future Response Costs incurred by the Forest Service, the Department of Agriculture, and EPA in connection with this AOC. For the purpose of this AOC, Future Response Costs are defined to encompass all costs that the United States has incurred in negotiating this AOC and will incur overseeing the implementation of the terms of this AOC, including all direct and indirect costs, including contractor costs, compliance monitoring costs (including the collection of and analysis of split samples) associated with reviewing and commenting on proposals, inspection of documents and field activities, coordinating with federal and state agencies and the public, and holding meetings. Future Response Costs shall also include all costs incurred in connection with the Forest Service's performance of a preliminary survey not inconsistent with the NCP, 40 C.F.R. § 300.615, for the purpose of assessing whether activities at the Site have resulted in any injury to, destruction of, or loss of natural resources in connection with the site within the meaning of Section 107(a)(4)(C) of CERCLA, § 9607(a)(4)(C).

58. Prior to the termination of this Order, the Forest Service and EPA will each separately submit to Respondent one or more bills, including a cost summary, for Future Response Costs incurred by their respective agencies in connection with

overseeing the implementation of the terms of this AOC. Within thirty (30) days of receipt of each bill, Respondent shall remit a cashier's or certified check, referencing the Block P Site, for the full amount of the bill to an address to be provided by the Forest Service.

For an EPA bill the payment shall be sent to following address:

Mellon Bank
EPA Region VIII
Attn: Superfund Accounting
Post Office Box 360859M
Pittsburgh, PA 15215

59. In the event that full reimbursement of the United States' Future Response Costs is not paid by Respondent within thirty (30) days of Respondent's receipt of each bill, as provided in the preceding paragraph, Respondent shall be liable to pay stipulated penalties, as provided in this AOC, and interest on the unpaid balance at the rate provided in Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4). Interest shall begin to accrue on the day of Respondent's receipt of the bill and shall continue to accrue until the date that full payment of the bill is received by the Forest Service or EPA.

60. In accordance with the provisions of Section XVI of this AOC, Respondent may dispute all or part of a bill for reimbursement of response costs submitted pursuant to this Order only on the basis of accounting errors or inclusion of costs outside the scope of this AOC. Any such objection shall be made in writing within thirty (30) days of receipt of the demand for

payment and shall specifically identify the disputed costs and the basis of the dispute. All undisputed costs shall be remitted by Respondent in accordance with the instructions in paragraph 58 of this AOC. Respondent bears the burden of establishing an EPA or Forest Service error or the inclusion of costs outside the scope of this AOC.

61. The United States reserves its rights to bring an action against Respondent to enforce the cost reimbursement provisions of this AOC, to seek penalties pursuant to Section 109 of CERCLA, 42 U.S.C. § 6909, and to bring an action pursuant to Section 107 of CERCLA, 42 U.S.C. § 9707, to recoup response costs set forth in the accounting not reimbursed by Respondent. EPA and the Forest Service also reserve their right to recover any past or future costs not reimbursed under this AOC.

XIX. STIPULATED PENALTIES

62. Unless there has been a written modification of a compliance date by the Federal Agencies or force majeure event as defined herein, in the event Respondent fails to meet any requirement of this AOC, Respondent shall pay stipulated penalties in the amount of \$500 per day, per violation for the first 10 days of violation; \$1,000 per day, per violation for the 11th through 20th day of noncompliance; and \$2,500 per day, per violation for the 21st day of noncompliance and every day thereafter. Compliance by Respondent shall include complete and timely performance of each activity required under this AOC or

complete and timely performance of all work described in any plan, statement or deliverable approved under this AOC.

63. All penalties shall begin to accrue on the date that complete performance is due or a violation occurs and shall continue to accrue through the final day of correction of the noncompliance. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this AOC.

64. Respondent may dispute the Federal Agencies' right to the stated amount of penalties by invoking the dispute resolution procedures under Section XVI of this AOC. Penalties shall accrue but need not be paid during the dispute resolution period. If Respondent does not prevail upon resolution, all penalties shall be due within 30 (thirty) days of resolution of the dispute. If Respondent prevails upon resolution, no penalties shall be paid.

65. The imposition of stipulated penalties is in the Federal Agencies' discretion. The Federal Agencies may in their discretion impose a letter penalty or no penalty at all for violations subject to stipulated penalties. Imposition of the stipulate penalty provisions of this AOC does not preclude EPA or the Forest Service from conducting all or part of the Work because of the Respondent's violation of, or failure, or refusal to comply with this AOC. In the event that EPA or the Forest Service assume performance of a portion or all of the Work because of Respondent's violation of, or failure or refusal to perform the Work as set forth in this AOC, Respondent shall be

liable for all costs incurred by EPA and/or the Forest Service in performing the Work in addition to the stipulated penalties that will be assessed.

66. The Federal Agencies will advise Respondent in writing of any stipulated penalties owed by Respondent pursuant to this Section. All penalties shall be paid to either the Forest Service or EPA, as directed in the written demand, by certified or cashier's check within thirty (30) days of the date of receipt of the demand for payment by the Federal Agencies. Interest shall begin to accrue on the unpaid balance from the date of the issuance of the Federal Agencies' demand for payment. Interest shall accrue at the rate provided in paragraph 59 of this AOC. Payment shall be made in accordance with the instructions in paragraph 58 of this AOC.

67. The stipulated penalties set forth in this Section do not preclude the Forest Service or EPA from pursuing any other remedies or sanctions that may be available to the Forest Service or EPA by reason of Respondent's failure to comply with any of the requirements of this AOC, nor shall payment of stipulated penalties relieve Respondent of the responsibility to comply with any requirement of this AOC.

XX. RESERVATION OF RIGHTS

68. Except as expressly provided in this AOC, the United States reserves all rights, claims and defenses it may have, including the right to bring an action against Respondent under Section 107 or 113 of CERCLA, 42 U.S.C. § 9607 or 9613, for

recovery of any response costs incurred in connection with the Site that are not reimbursed by Respondent. Except as provided in Section XX, Covenants Not to Sue, nothing in this AOC shall be construed as releasing Respondent from any liability for any of its actions. The United States reserves the right to take any enforcement action pursuant to CERCLA or any other legal authority for relief, including, but not limited to, injunctive relief, monetary penalties, and damages for any violation of this AOC. Furthermore, nothing in this AOC shall be construed to limit the power and authority of the United States to take, direct, or order all actions necessary to protect the public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants at or from the Site.

69. The parties to this AOC reserve any claims they now have, or may have in the future, against any third party including, but not limited to, claims under Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, for recovery of response costs, including oversight costs arising out of, or related to, this AOC, and any future and/or past costs incurred in connection with the Site. Nothing in this AOC shall constitute or be construed as a release from any claim, cause of action or demand against any person, firm, partnership, or corporation not a signatory to this AOC for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous

substances, pollutants, or contaminants found at, taken to, or taken from the Site.

XXI. COVENANTS NOT TO SUE

70. Respondent covenants not to sue and agrees not to assert any action or claim against the Forest Service or the United States with respect to any work it performs pursuant to this AOC for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or under any other provision of law. This AOC does not constitute any decision or preauthorization of funds under section 111(a)(2) of CERCLA. Respondent further waives all other statutory and common law claims against EPA and the Forest Service, including but not limited to, contribution and counterclaims, relating to or arising out of conduct of the EE/CA.

XXII. INDEMNIFICATION

71. Respondent agrees to indemnify and hold the United States and its agencies, departments, agents and employees harmless from all claims arising from acts or omissions of Respondent or those acting on its behalf, including its officers, employees, agents, contractors, subcontractors, or assigns, in carrying out activities under this AOC. Respondent has an affirmative duty to protect from injury and damage the land, property, and other interests of the United States. Damage includes, but is not limited to, fire suppression costs and all costs and damages associated with restoration or rehabilitation

of natural resources associated with Respondent's activities on the Site. Respondent shall be liable for damage to all roads and trails of the United States caused by Respondent, or those acting on its behalf, except that liability shall not include reasonable and ordinary wear and tear.

XXIII. OTHER CLAIMS

72. By entering into this AOC, EPA and the Forest Service assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The Forest Service and EPA shall not be deemed to be a party to any contract entered into by Respondent or its contractors to carry out actions pursuant to this AOC.

XXIV. NOTICE OF COMPLETION

73. Upon completion of all requirements in the Work Plan, Respondent shall certify in writing to the Forest Service and EPA that all requirements under this AOC, including any additional work and payment of stipulated penalties, have been completed. The certification shall be signed by a representative of Respondent with the requisite knowledge and authority, and shall include the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete." If the Federal Agencies agree with Respondent's certification, they will so notify Respondent in writing and this AOC, with the exception of any continuing obligations, shall be terminated. For the purposes of this Section, continuing obligations shall include, but not be limited

to, the following obligations contained in this AOC: Section XV (Record Preservation), Section XXI (Covenants Not to Sue), Section XX (Reservation of Rights), Section XXII (Indemnification), and Section XXIII (Other Claims). If the Federal Agencies determine that any requirements of this AOC have not been completed by Respondent, the Federal Agencies will notify Respondent in writing and specify the deficiencies. Respondent shall correct such deficiencies in accordance with the Federal Agencies' notice. Failure by Respondent to correct such deficiencies shall be a violation of this AOC.

XXV.

EFFECTIVE DATE, MODIFICATION
AND RESPONDENT'S COSTS

74. The effective date of this AOC shall be the date it has been executed by all of the parties.

75. The terms of this AOC may be modified only by the written agreement of the parties.

76. No informal advice, guidance, suggestion or comment by the Forest Service or EPA regarding any document or deliverable submitted by Respondent relieves Respondent of its obligation to obtain the formal written approvals required by this AOC or to comply with the requirements of this AOC.

77. Respondent shall bear its own costs and attorneys fees.

XXVI. PRESERVATION OF ANTIQUITIES

78. If, while implementing the terms of this AOC, Respondent discovers any objects of historic or scientific interest, it shall notify the OSC and leave such discoveries

intact until and unless otherwise instructed by the OSC. For the purposes of this Section, objects of historic or scientific interest include, but are not limited to, historic or prehistoric ruins, fossils, or artifacts. Compliance with any protective and mitigative measures specified by the OSC shall be Respondent's responsibility.

FOR THE UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE REGION 1:

By:



Name: ^{Rmk}for Dale Bosworth

Title: Regional Forester

Date:

9/24/98

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8:

By: Jerry Anderson, Acting


Name: Max H. Dodson

Title: Assistant Regional Administrator
Ecosystems Protection and Remediation
Region VIII
U.S. Environmental Protection Agency

Date: September 28, 1998

FOR DOE RUN COMPANY:

By:


Walter W. Nowotny, Jr.

Title: Vice President

Date:

September 24, 1998

ATTACHMENT 1

STATEMENT OF WORK



United States
Department of
Agriculture

Forest
Service

Lewis and Clark
National Forest

P.O. Box 869
Great Falls, MT 59403-0869
406 791-7700
FAX 406 761-1972

File Code: 2160/6530

Date: September 23, 1998

John Carter
The Doe Run Resources Corporation
P.O. Box 500
Viburnam, MO. 65566

Dear John;

This letter serves to notify you of approval by the Forest Service and U.S. Environmental Protection Agency of the Statement of Work submitted on your behalf by Barr Engineering as Appendix A (or Attachment 1) to the Revised Work Plan for the Engineering Evaluation/Cost Analysis, Block P Tailings Site, Barker, Montana dated September 1998 *with the following minor changes:*

Section I, Objective shall read: "The Respondent shall prepare an Engineering Evaluation/Cost Analysis (EE/CA) of alternatives following EPA guidance and subject to Forest Service and EPA approval to reduce the release of contaminants of the tailings from the Block P Mill Tailings Site." This clarifies that not just contaminants through water and air erosion will be considered, but surface and groundwater pathways as well.

Section IV, Schedule. The last sentence of that section shall read: "With the exception of submittal of the final EE/CA, Doe Run shall amend and submit a revised deliverable to the Forest Service and EPA within 30 days of receipt of the agencies comments on each draft deliverable." This reflects the EPA's joint role in this process.

Other portions of the Revised Work Plan are still in review by the agencies. We will notify you of any additional comments on, or approval of, that document shortly.

In addition, we acknowledge receipt of your Health and Safety Plan. The Forest Service accepts the plan with the following modification: Section 2.2 on page 2-1 - the Agency contact listed in Table 2-1 shall be Robin Strathy (Forest Service) at (406) 791-7726.

This letter also serves to approve the Revised Field Sampling and Analysis Plan (SAP) submitted on September 16, 1998 as revised by the Addendum dated September 22, 1998, both of which shall constitute the SAP.



There is no need to change or amend the documents if you agree to the specified changes. Please call Robin at (406) 791-7726 if there is a need to discuss any of the above.

Sincerely,

/s/ Robin Strathy

ROBIN STRATHY

On-Scene Coordinator

/s/ Rosemary Rowe

ROSEMARY ROWE

Project Manager

cc: Barr Engineering, attn. John Hunt
RO ENG, attn. Bob Kirkpatrick
DEQ, attn. Judy Reese
D7
R2 OGC, attn. Steve Silverman
USEPA, R8, attn. Rick Baird

Attachment 1

Statement of Work Engineering Evaluation/Cost Analysis Block P Mill Tailings Site Barker, Montana

I. Objective

The Respondent shall prepare an Engineering Evaluation/Cost Analysis (EE/CA) of alternatives following EPA guidance and subject to Forest Service and EPA approval to reduce the release of contaminants [through water and air erosion] of the tailings from the Block P Mill Tailings Site.

II. Areal Extent of the EE/CA

The EE/CA shall cover the following areas associated with the Block P Mill Tailings Site:

Mill Tailings Pond(s): Tailings from an historic lead-zinc mill are located in two settling basins adjacent to Galena Creek near its confluence with the Dry Fork of Belt Creek. The tailings ponds cover approximately 15 acres. The volume of tailings in this area has been previously estimated at 500,000 to 635,000 cubic yards, but recent analysis suggests that this volume estimate may be higher than the actual value. This includes tailings that migrated from the impoundments.

Streamside Tailings in Dry Fork of Belt Creek: Previous sources identify approximately 10,000 cubic yards of material resembling mill tailings present along the bank of the Dry Fork of Belt Creek downstream of its confluence with Galena Creek.

III. Previous Work Performed

The United State Forest Service (USFS) conducted a time-critical CERCLA removal action at the site in early 1995. This work consisted of limited site grading and other surface water drainage modifications intended to reduce the potential for further release of tailings due to breaching of the settling basins.

On November 27, 1996, the Respondent submitted to USFS for review and comment a letter report describing potential removal action alternatives. To assist in the determination and refinement of removal action objectives, the letter report also included a preliminary list of potential Applicable Relevant and Appropriate Regulations (ARARs) for the potential removal action alternatives. This

letter report, combined with the comments provided by the Montana Department of Environmental Quality (MDEQ) shall form the basis for alternatives to be included in the Work Plan.

The Respondent conducted additional surface water quality monitoring of Galena Creek and the Dry Fork of Belt Creek in 1997. The results of this work are summarized in *Water Quality Assessment Report for the Block P Mining Area* (prepared by Barr Engineering Company) submitted to USFS on December 29, 1997.

IV. Work to Be Performed

A. Work Plan, Field Sampling and Analysis Plan, Project Health and Safety Plan (Task 1)

The Respondent shall prepare and submit to USFS and USEPA for review and approval a Work Plan that describes the technical and coordination activities to be followed in completing the EE/CA. The Work Plan shall include proposed removal objectives, detailed potential removal action alternatives, and draft ARARs. The list of potential removal action alternatives to be examined is anticipated to include: no action, in-situ fixation/stabilization, reprocessing, soil cover construction, geosynthetic clay capping, geomembrane capping, onsite isolation vault construction, and offsite disposal. The potential for a USFS/Respondent land exchange will also be examined.

A Sampling and Analysis Plan (SAP) shall be prepared to describe specific methods that will be used to address identified data gaps. The SAP will delineate:

- The environmental media to be tested (e.g., groundwater, soil).
- Specific testing locations within these media (including a map).
- Data collection methods and analyte suites for each environmental media to be tested.
- Analytical methods and associated detection limits.
- Quality assurance/quality control measures.

The SAP shall also include a summary of the field work conducted at the site since 1996 but prior to the AOC. Field sampling activities already conducted include improved site mapping and sampling and grain size analyses of tailings, settling basin dike soils, and potential cover soils. In addition, the SAP may also include descriptions of possible geotechnical sampling and testing activities to support subsequently developed removal designs. The SAP shall be prepared consistent with the guidance documents referenced in the Administrative Order on Consent. Respondent is responsible for fulfilling any additional data needs identified by the Respondent, USFS, or EPA consistent with the general scope and objectives of this EE/CA and the AOC.

In the event that field activities are required prior to submittal of the EE/CA, such work will be conducted in accordance with the health and safety protocols contained in *Project Health and Safety Plan, Block P Mine Site, May 1997*, previously developed by the Respondent for 1997 water quality monitoring activities. This plan will be reviewed for its applicability to the Block P Mill Tailings site, revised as necessary, and submitted with the Work Plan and Field Sampling and Analysis Plan.

B. EE/CA Report (Task 2)

The Respondent shall prepare and submit to USFS and USEPA for review and approval an EE/CA which follows the outline and content described in the publication, *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA* (EPA540-R-93-057, August 1993). The principal subjects to be included are: Site Characterization, Identification of Removal Action Objectives, Identification and Analysis of Removal Action Alternatives, Comparative Analysis of Removal Action Alternatives, and Recommended Removal Action.

V. Coordination

Respondent shall submit a written progress report to USFS and USEPA concerning activities undertaken pursuant to this Consent Order every thirty (30) days, commencing thirty-five (35) days from the effective date of the Consent Order, until the Consent Order is terminated or unless otherwise directed by USFS. These reports shall describe all significant developments during the preceding period; work performed and problems encountered; the actual Work performed, any problems encountered in completing this Work; the developments anticipated and the work scheduled during the next reporting period, including a schedule of completion for the unfinished Work from the preceding period and Work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

VI. Schedule

Doe Run shall comply with the following schedule for completion of work, as further provided in the AOC:

Work Task	Deadline
Submit Draft Work Plan to USFS (Task 1)	Completed.
Submit Draft Sampling and Analysis Plan (Task 1)	Completed.
Submit Draft Health and Safety Plan (Task 1)	Completed.

Work Task	Deadline
Submit Draft EE/CA (Task 2)	Within 150 days following USFS and USEPA approval of Work Plan, Sampling and Analysis Plan, and Health and Safety Plan.
Submit Final EE/CA	Within 45 days following receipt of USFS and USEPA comments on the Draft EE/CA.

All deliverables shall be submitted initially in draft form, in accordance with the schedule above, and are subject to review, comment, and written approval by the Forest Service and EPA. With the exception of submittal of the final EE/CA, Doc Run shall amend and submit a revised deliverable to the Forest Service within 30 days of receipt of the Forest Service's comments on each draft deliverable.